

I Claim:

1. A program controlled unit comprising:

an OCDS module consisting of a plurality of components;

a plurality of first supply voltage connections for applying a first supply voltage;

a plurality of second supply voltage connections for applying a second supply voltage; and

a plurality of components configured for being supplied with power by the first supply voltage;

at least some of said plurality of components of said OCDS module configured for being supplied with power by the second supply voltage.

2. The program controlled unit according to claim 1; wherein said plurality of components configured for being supplied with power by the first supply voltage cannot also be supplied with power by the second supply voltage.

3. The program controlled unit according to claim 1, wherein said at least some of plurality of components of said OCDS module that are configured for being supplied with power by

the second supply voltage cannot also be supplied with power by the first supply voltage.

4. The program controlled unit according to claim 1, wherein said OCDS module is configured to be connected to an external debugger and said OCDS module is configured for interacting with the debugger to debug programs executed by the program controlled unit.

5. The program controlled unit according to claim 4, wherein:

said OCDS module is configured to be controlled by the debugger; and

said OCDS module is configured to execute particular actions actuated by the debugger.

6. The program controlled unit according to claim 5, wherein said at least some of said plurality of components of said OCDS module that are configured for being supplied with power by the second supply voltage include components that have a state dependent on an actuation by the debugger.

7. The program controlled unit according to claim 5, wherein said at least some of said plurality of components of said OCDS module that are configured for being supplied with power

by the second supply voltage include only components that have a state dependent on an actuation by the debugger.

8. The program controlled unit according to claim 5, further comprising a control device configured for putting said OCDS module into a state prescribed by the debugger.

9. The program controlled unit according to claim 8, further comprising:

a control information memory;

said control device formed by a state machine or a CPU configured for transferring data stored in said control information memory to assigned locations within said OCDS module.

10. The program controlled unit according to claim 8, further comprising:

a control information memory;

said control device formed by a CPU; and

said CPU configured for using said control information memory as a program storage device and for executing a program

represented by content stored in said control information memory.

11. The program controlled unit according to claim 8, further comprising:

a control information memory;

said control device configured for putting said OCDS module into a state prescribed by the debugger taking into account control information stored in said control information memory.

12. The program controlled unit according to claim 11, wherein said control information memory can be written to by the debugger.

13. The program controlled unit according to claim 11, wherein said control information memory is configured for being powered by the second supply voltage.

14. The program controlled unit according to claim 13, wherein:

said control information memory is one of said plurality of components of said OCDS module; and

only said control information memory is configured for being supplied with power by the second supply voltage.

15. The program controlled unit according to claim 11, wherein said control information memory is formed by a volatile memory.

16. The program controlled unit according to claim 8, further comprising:

a control information memory;

said control device configured for checking, following an application of the first supply voltage, whether said control information memory contains data required to put said OCDS module into another state.

17. The program controlled unit according to claim 16, wherein said control device is configured for performing the checking by determining whether a particular value is stored at a particular location within said control information memory.

18. The program controlled unit according to claim 16, wherein said control device is configured for putting said OCDS module into a state prescribed by a content of said

control information memory, if the checking reveals that said OCDS module needs to be put into another state.

19. The program controlled unit according to claim 1, wherein all of said plurality of components of said OCDS module are configured for being supplied with power by the second supply voltage

20. A method for debugging programs, which comprises:

providing a program controlled unit including an OCDS module for executing particular actions actuated by an external debugger connected to the program controlled unit;

supplying at least a portion of the OCDS module with power before supplying other components of the program controlled unit with power; and

from the debugger, supplying the OCDS module with control information prescribing a particular state of the OCDS module.

21. The method according to claim 20, which further comprises immediately putting the OCDS module into the state prescribed by the control information.

22. The method according to claim 20, which further comprises:

writing the control information to a control information memory in the OCDS module; and

after the other components of the program controlled unit have been supplied with power, putting the OCDS module into the state prescribed by the control information.

23. The method according to claim 20, which further comprises:

writing the control information to a control information memory in the OCDS module; and

immediately after the other components of the program controlled unit have been supplied with power, automatically putting the OCDS module into the state prescribed by the control information.

24. The method according to claim 23, which further comprises before putting the OCDS module into another state, checking whether the control information memory is storing valid control information.

25. The method according to claim 24, wherein the checking step is performed by determining whether a particular value is stored at a particular location within the control information memory.

26. The method according to claim 20, which further comprises:

providing a control information memory as the portion of the OCDS module that is supplied with power before supplying the other components of the program controlled unit with power;
and

immediately putting the OCDS module into the state prescribed by the control information.